

**Aprendizagem e Mineração de Dados**

Mestrado em Engenharia Informática e Multimédia

**Relatório**

*Final Project A*

**AMD\_D\_20**

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**1.**

The data snippet sent by "MedKnow" contains all the data gathered, throughout time, about each patient’s visit to a doctor in their ophtalmology team. It contains four specific patient conditions (variable attributes) and the type of lenses that were prescripted to that patient (the class label attribute).

The data snippet contains 5 attributes and 16 different records.

**age**: The age of the patient. Can be assigned 3 values: "young" - when the patient is still at a young age (normally 0 - 27); "pre-presbyopic" - when the patient isn't young anymore, but still hasn't developed any presbyopic condition (normally 28 - 38); "prebyopic" - when the patient has developed a presbyopic condition. Note that presbyopia is an eye condition in which the patient's eye slowly loses the ability to focus quickly on objects that are close. It's a disorder that affects everyone during the natural aging process.

**prescription**: The type of eye defect of the patient. Can be assigned 2 values: "hypermetrope" - when the patient can see distant objects but is unable to see nearby objects clearly; "myope" - when the patient is unable to see things clearly unless they're relatively close to the eyes.

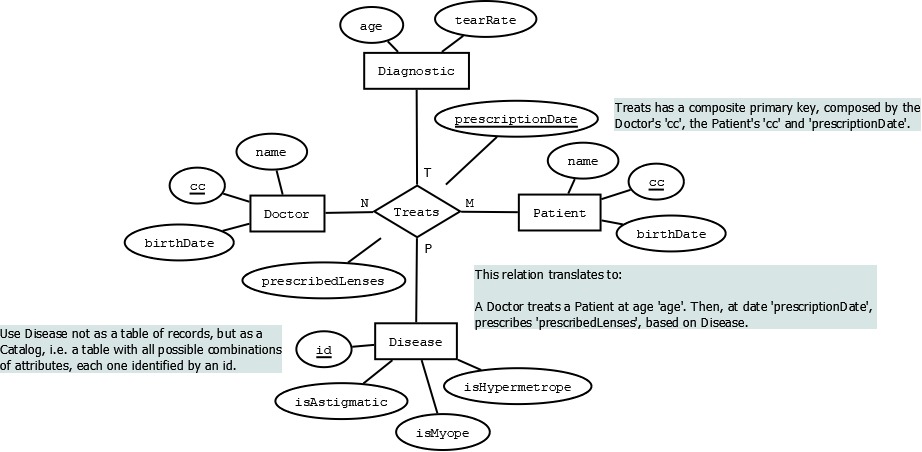
**astigmatic**: Whether the patient suffers from astigmatism or not. Can be assigned 2 values: "yes" or "no". Note that astigmatism is a common and generally treatable imperfection in the curvature of the eye that causes blurred distance and near vision.

**tear\_rate**: The tear rate of the patient. Can be assigned 2 values: "normal" or "reduced". Note that tear rate is defined as the percent decrease per minute of fluorescein concentration in the patient's tears after the instillation of fluorescein.

**lenses**: The type of lenses prescripted to the patient, based on his conditions (the other 4 attributes). Can be assigned 3 values: "hard" if the patient is more advised to use hard contact lenses; "soft" if the patient is mroe advised to use soft contact lenses; "none" if the patient doesn't need lenses at all.

**3. UPDATE ER MODEL**

**Explain**



**4.**